NOTICE
OF REACTIVATION

INCH-POUND

MIL-C-55302/90D(CR)
NOTICE 2
29 May 1992
SUPERSEDING
NOTICE 1
22 October 1991

MILITARY SPECIFICATION SHEET

CONNECTORS, PRINTED CIRCUIT SUBASSEMBLY AND ACCESSORIES:
RECEPTACLE, RIGHT-ANGLE, HERMAPHRODITIC CONTACT
(.100 INCH SPACING)

MIL-C-55302/90D(CR), dated 12 February 1982, is hereby reactivated and may be used for either new or existing design acquisition.

(Copies of the referenced federal and military specifications, standards, and handbooks are available for the Department of Defense Stock Point, Naval Publications and Forms Center (ATTN: Standardization Documents Order Desk, Bldg 4D) 700 Robbins Avenue, Philadelphia, PA 19111-5094.)

Preparing activity:
Army - CR

Agent:
DLA - ES

(Project 5935-A444-02)

MILITARY SPECIFICATION SHEET

CONNECTORS, PRINTED CIRCUIT SUBASSEMBLY AND ACCESSORIES: RECEPTACLE, RIGHT-ANGLE, HERMAPHRODITIC CONTACT (.100 INCH SPACING)

This specification sheet is approved for use by the Communications Research and Development Command, Department of the Army, and is available for use by all Departments and Agencies of the Department of Defense.

The complete requirements for procuring the connectors described herein shall consist of this document and the latest issue of Specification MIL-C-55302.

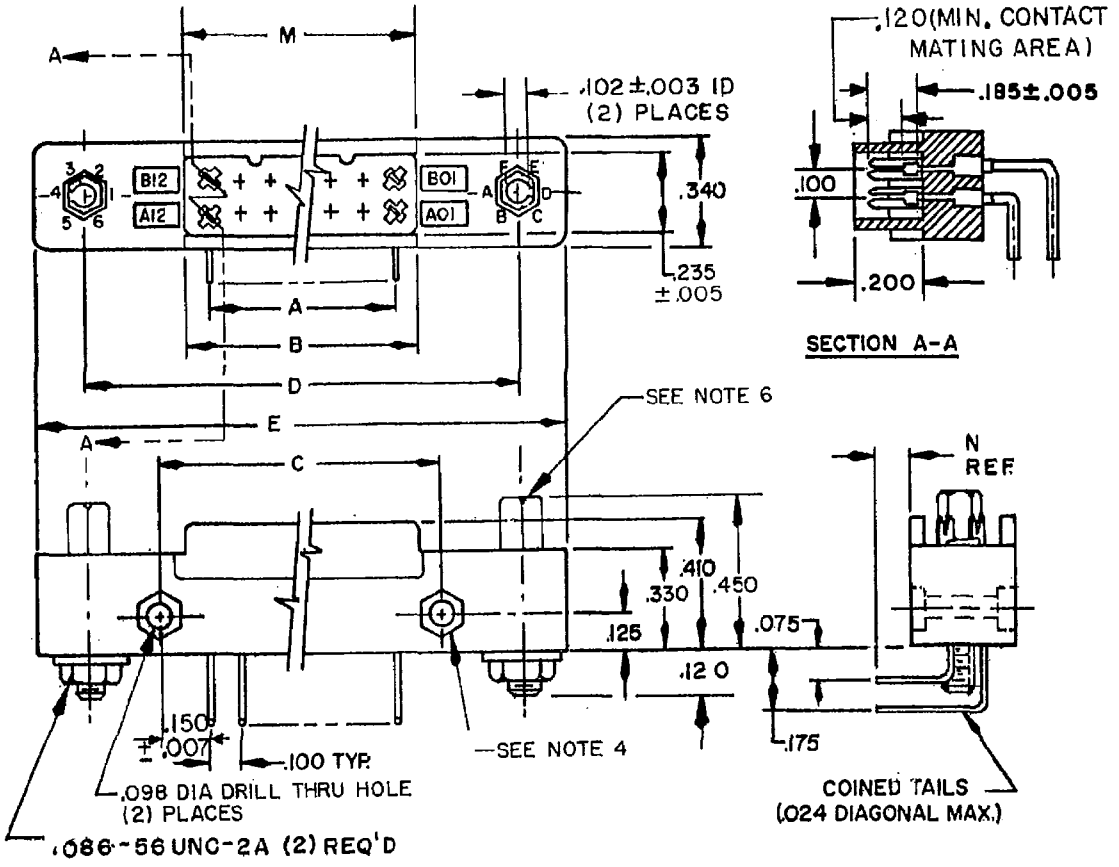
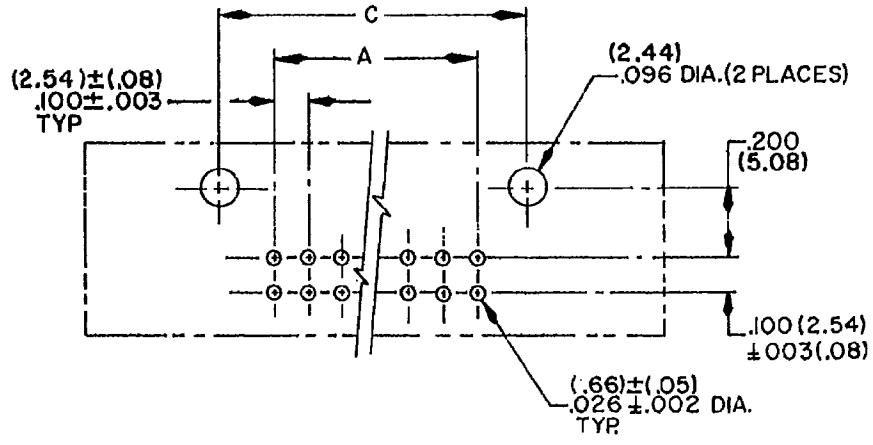


FIGURE 1. Connector, receptacle (.100 inch spacing).

FSC 5935



Typical hole grid layout.

INCHES	MM	INCHES	MM	INCHES	MM	INCHES	MM
.003	.08	.098	2.49	.175	4.44	.330	8.38
.005	.13	.100	2.54	.185	4.70	.340	8.64
.024	.61	.102	2.59	.200	5.08	.410	10.41
.075	1.91	.120	3.05	.235	5.97	.462	11.73
.086	2.18	.125	3.18				

For .054 to .070 Thick Printed Circuit Board

Dash number	No. of contacts	Dimensions (inches) A ±.006(.15)	B ±.006(.15)	C ±.006(.15)	D ±.006(.15)	E ±.006(.15)	M ±.006(.15)	N REF
01	24	1.100 (27.94)	1.236 (31.39)	1.400 (35.56)	1.900 (48.26)	2.200 (55.88)	1.270 (32.26)	.110 (2.79)
02	48	2.300 (58.42)	2.436 (61.87)	2.600 (66.04)	3.100 (78.74)	3.400 (86.36)	2.470 (62.74)	
03	72	3.500 (88.90)	3.636 (92.35)	3.800 (96.52)	4.300 (109.22)	4.600 (116.84)	3.670 (93.22)	
04	96	4.700 (119.38)	4.836 (122.83)	5.000 (127.00)	5.500 (139.70)	5.800 (147.32)	4.870 (123.70)	

For .084 to .103 Thick Printed Circuit Board

Dash number	No. of contacts	Dimensions (inches) A ±.006(.15)	B ±.006(.15)	C ±.006(.15)	D ±.006(.15)	E ±.006(.15)	M ±.006(.15)	N REF
05	24	1.100 (27.94)	1.236 (31.39)	1.400 (35.56)	1.900 (48.26)	2.200 (55.88)	1.270 (32.26)	.123 (3.12)
06	48	2.300 (58.42)	2.436 (61.87)	2.600 (66.04)	3.100 (78.74)	3.400 (86.36)	2.470 (62.74)	
07	72	3.500 (88.90)	3.636 (92.35)	3.800 (96.52)	4.300 (109.22)	4.600 (116.84)	3.670 (93.22)	
08	96	4.700 (119.38)	4.836 (122.83)	5.000 (127.00)	5.500 (139.70)	5.800 (147.32)	4.870 (123.70)	

FIGURE 1. Connector, receptacle (.100 inch spacing) - Continued.

For .115 to .135 Thick Printed Circuit Board								
Dash number	No. of contacts	Dimensions (inches)						
		A ±.006(.15)	B ±.006(.15)	C ±.006(.15)	D ±.006(.15)	E ±.006(.15)	M ±.006(.15)	N REF
09	24	1.100 (27.94)	1.236 (31.39)	1.400 (35.56)	1.900 (48.26)	2.200 (55.88)	1.270 (32.26)	.155 (3.94)
10	48	2.300 (58.42)	2.436 (61.87)	2.600 (66.04)	3.100 (78.74)	3.400 (86.36)	2.470 (62.74)	
11	72	3.500 (88.90)	3.636 (92.35)	3.800 (96.52)	4.300 (109.22)	4.600 (116.84)	3.670 (93.22)	
12	96	4.700 (119.38)	4.836 (122.83)	5.000 (127.00)	5.500 (139.70)	5.800 (147.32)	4.870 (123.70)	

NOTES:
1. Dimensions are in inches.
2. Metric equivalents are given for general information only and are based upon 1.00 inch = 25.4 mm.
3. Unless otherwise specified, tolerance is ±.010 (.25 mm).
4. Dimensions are .162 (4.11 mm) hex across the flats by .052 deep (1.32 mm) - 4 places.
5. Metric equivalents are in parentheses or in columns.
6. Keying sockets shown are in positions 4 and D.

FIGURE 1. Connector, receptacle (.100 inch spacing) - Continued.

REQUIREMENTS:

Dimensions and configuration: See figure 1.

Material and finish:

Contact: 0.020 inch thick phosphor bronze per QQ-B-750, composition "A". Gold plate per MIL-G-45204, type II, grade D, class 1, over nickel plating per QQ-N-290, class 2, 30 to 100 microinches.

Insulator: MIL-M-14, type SDG-F.

Keying hardware: 2 each hex nuts and washers, stainless steel, class 300 per QQ-S-763, passivated per QQ-P-35, and 2 each keying sockets, free machining brass per QQ-B-626, nickel plated per QQ-N-290. For direct government procurement the keying hardware shall be assembled to the connector. For other orders the keying hardware may be furnished loose as specified in contract or order.

Mounting hardware: 2 each machine screws 2-56, 0.5 inch long, 2 flat washers, and 2 hex nuts of corrosion resistant steel, shall be furnished in a bag within the connector package for direct government orders. For other orders, the mounting hardware may be furnished loose as specified in contract or order.

Contact identification: The first and last contact in each row shall be identified by an alphabetical-numerical code (e.g., A01, B12). The letter designates the row and the number designates the contact position within that row. Every fifth contact in each row shall have its identification mark molded in.

Contact retention: 6 pounds.

Mating and unmating: The maximum insertion force, in pounds, shall not exceed a value equal to .5 times the number of contacts, and the withdrawal force, in pounds, shall be a minimum of .11 times the number of contacts and shall not exceed the measured insertion force.

Contact separation force: 1 ounce minimum.

Contact resistance: The contact resistance shall not exceed 20 milliohms.

Dielectric withstanding voltage:

Sea level: 1,000 volts rms, 60 Hz.

High altitude: 300 volts rms, 60 Hz.

Current rating, maximum: 5 amperes.

Keying socket: When required, can be easily keyed to the desired positions by using a standard type wrench. Connectors are supplied with keying sockets in "4" and "D" positons.

Mating connectors: Shall conform to MIL-C-55302/89 and MIL-C-55302/91, or MIL-C-55302/93 and MIL-C-55302/95.

Part number: M55302/90-(dash number from figure 1).

Group submission: MIL-C-55302/92, MIL-C-55302/94, and MIL-C-55302/96.

Revison letters are not used to denote changes due to the extensiveness of the changes.

Custodians:
Army - CR

Review activities:
Army - AT, AV, MI
DLA - ES

User activities:
Army - AR, ME

Preparing activity:
Army - CR

Agent:
DLA - ES

(Project 5935-A179-2)

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